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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/917,674	07/31/2001	Dally Moya	003780-059	1178	
75	11/05/2003	EXAMINER			
William L. Mathis BURNS, DOANE, SWECKER & MATHIS, L.L.P. P.O. Box 1404 Alexandria, VA 22313-1404			ZALUKAEVA, TATYANA		
			ART UNIT	PAPER NUMBER	
			1713	12	
			DATE MAILED: 11/05/2003	10	

Please find below and/or attached an Office communication concerning this application or proceeding.

• 4			,	CLO.	18				
Office Action Summary		Application No.		Applicant(s)					
		09/917,674		MOYA ET AL.					
		Examiner		Art Unit					
		Tatyana Zalukae	va	1713					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address									
THE N - Exten after S - If the - If NO - Failur - Any re	PRIOD STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION.  sions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, apply received by the Office later than three months after the mailing digital patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, hower  within the statutory mining  will apply and will expire Solution to	wer, may a reply be time mum of thirty (30) days SIX (6) MONTHS from the become ABANDONED	will be considered timely the mailing date of this of (35 U.S.C. § 133).	y. ommunication.				
1)⊠	Responsive to communication(s) filed on 29 S	September 2003 .							
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b)⊠ Th	is action is non-fir	nal.						
3)	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
· · ·	on of Claims								
4)⊠ Claim(s) <u>1-26</u> is/are pending in the application.									
4a) Of the above claim(s) is/are withdrawn from consideration.									
5) Claim(s) is/are allowed.									
6)⊠ Claim(s) <u>1,2 and 4-26</u> is/are rejected.									
7)⊠ Claim(s) <u>3</u> is/are objected to.									
•	Claim(s) are subject to restriction and/or on Papers	r election requiren	nent.						
9) The specification is objected to by the Examiner.									
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.									
If approved, corrected drawings are required in reply to this Office action.									
12) The oath or declaration is objected to by the Examiner.									
	nder 35 U.S.C. §§ 119 and 120								
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a)L	☐ All b)☐ Some * c)☐ None of:								
	Certified copies of the priority documents								
	Certified copies of the priority documents								
	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.								
	cknowledgment is made of a claim for domesti	·	•		application).				
a) ☐ The translation of the foreign language provisional application has been received.									
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.									
Attachment(s)									
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) 🔲		(PTO-413) Paper No atent Application (PT					

U.S. Patent and Trademark Office PTOL-326 (Rev. 04-01)

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#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 29, 2003 has been entered.
- 2. Applicants are advised that even though at this time no election of species requirement is made, however, if claims are further amended, such election of species with regard to the method of making the starting compound may be requested.

#### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1, 2, 5, 7, 9, 15, 16, 17, 18, 20-22, are rejected under 35 U.S.C. 102(b) as being anticipated by Doenges et al (U.S. 4,458,006).

Doenges discloses a photopolymerizable compound

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$$\begin{array}{c|c} R_2 & & \\ C & O - CH_Z - (CH_2O)_{\overline{m}} - R_1 - (OCH_2)_{\overline{m}} - CH_2 - O \\ CH_2 & C & C \\ O & O & CH_2 \end{array}$$

wherein R1 is a naphthylene group, a biphenyldiyl group or a dinaphthyl-methanediyl group or a group formed by two phenylene groups which are linked by a bridge comprised of an oxygen atom, a sulphur atom, a sulfone group or an alkylene group which is substituted by at least one carboxylic acid group, carboxylic acid alkyl ester groups, halogen atom or phenyl group, or by such a substituted alkylene group which is connected to the group R1 of another molecule via said substituent, R2 is hydrogen or methyl, m is 0 or 1. (abstract). This reads on the compounds of the instant claim 1. The polymerizable compounds contained in the mixture can be prepared using known methods. It is, for example, possible to convert polyvalent phenols HO--R1 --OH into bis-(.beta.-hydroxy-ethoxy) aromatic compounds by reacting them with ethylene carbonate, ethylene oxide, propylene oxide or styrene oxide. By azeotropic esterification with acrylic or methacrylic acid, polymerizable compounds of the. These compounds can also be prepared by reacting hydroxy-methyl aromatic compounds with the corresponding carboxylic acid halides or by re-esterifying the corresponding acetoxymethyl compounds (col.3, lines 49-67, col.4, lines 1-2). With specific regard to claim 2 Doegens teaches that another compound is added to a mixture, such as those that contain the following groups: --COOH, groups. Examples of these are methyl

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methacrylate/methacrylic acid copolymers, or copolymers of methacrylic acid, alkyl methacrylates and methyl methacrylate and/or styrene, acrylonitrile and the like. (col. 4, lines 3-10)

#### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. Claims 4,6,8, 10-14, 19, 23, 26 are rejected under 35 U.S.C. 102 (b) as anticipated by or in the alternative under 35 USC 103(a) as being unpatentable over Doeeegens et al.

Doegens discloses the compound as claimed in the instant claim 1. *In re Brown*, 173 USPQ 685 (CCPA 1972), the Court of Customs and Patent Appeakls (CCPA) explicitly approved the 102/103 rejection of a product-by-process claim over a reference which

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showed a product which appeared to be identical or only slightly different from the claimed product.

Because of the nature of product-by process claims, the Examiner cannot ordinarly focus on the precise difference between the claimed product and the disclosed product. It is then Applicants' burden to prove that an unobvious difference exists. See *In re Marosi*, 218 USPQ 289, 292-293 (CAFC 1983). Also consult *In re Thorpe*, 227 USPQ 964 (CAFC 1985) wherein the rejected product-by-process claims over a product, which although prepared in a different manner, appeared to be the same (prima facie) as the claimed product. See also footnote 11 O.G. Notice 1162 59-61, wherein a 35 USC 102/103 rejection is authorized in the case of product-by-porocess claims because the exact identity of the claimed product or the prior art product cannot be determined by the Examiner.

8. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doegens

This rejection is made in the sense of In re Durden, JR (226 USPQ 359 (CAFC 1985) A "new" process may still be obvious even when considered as a whole, not withstanding that specific starting material or resulting product or both is not found in the prior art. IN the instant case the only difference is how the staring OH- containing aromatic polyester was obtained, however, a person skilled in the art would have found to employ any known method in order to obtain a staring compound with the reasonable expectation of success.

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### Allowable Subject Matter

9. Claim 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. None of the prior art references suggest specific combination of a reaction product of PET glycolyzed with neopentyl glycol and further modified with acrylic acid or its derivative.

## Response to Arguments

- 10. Applicant's arguments with respect to claims 1-26 have been considered but are most in view of the new ground(s) of rejection.
- 11. Other prior art of interest is cited in PTOL-892.
- 12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (703) 308-8819. The examiner can normally be reached on 9:00 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703) 308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

Tatyana Zalukaeva Primary Examiner Art Unit 1713 Page 7

October 27, 2003